

ABSTRACT OF THE DISCLOSURE

A method for monitoring instantaneous behavior of a tire in a rolling condition includes acquiring and storing at least one reference curve representing an acceleration profile of at least one specified point of the tire as a function of its position during at least one portion of a revolution of the tire; continuously acquiring signals of acceleration of the at least one point; deriving from the signals of acceleration at least one cyclic curve of acceleration of the at least one point; comparing the at least one cyclic curve with the at least one reference curve; and emitting a signal depending on the comparison that indicates the instantaneous behavior of the tire. The at least one reference curve represents the acceleration profile in at least two directions, including two or more of a centripetal direction, a tangential direction, and a lateral direction. A related system and tire are also disclosed.